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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/807,580 | 04/13/2001 | Albert Hasper | NEDER24.001A | 2074 |

20995 7590 05/19/2005

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EXAMINER

FOX, CHARLES A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3652

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,580

Applicant(s)

HASPER ET AL.

Examiner

Charles A. Fox

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8,9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8,9 and 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20050315.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

In view of the Decision of Appeal filed on February 16, 2005, PROSECUTION IS HEREBY REOPENED. New rejections of the claims are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Information Disclosure Statement

The information disclosure statement filed March 15, 2005 fails to comply with 37 CFR 1.97(d) because it lacks a statement as specified in 37 CFR 1.97(e). It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 8,9 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muka in view of Toda et al. Regarding claims 8 and 9 Muka US 6,079,927 teaches a device for sorting wafers comprising:

- a housing;

- a wafer handling device arranged in a chamber;

- a part for receiving at least two wafer cassettes in said housing, and separated from said chamber;

- said cassettes positioned against said housing such that they can be opened to said chamber for removal or insertion of wafers therein;

- a store for closable cassettes within the housing;

- a handling device for handling closable cassettes within the housing;

- a process station attached to said housing and accessible by said wafer transfer device;

wherein the wafer handling device is capable of transferring the wafers between cassettes in a sorting function. Muka does not teach the wafer transfer device as accessing a measurement device. Toda et al. US 6,343,239 teaches a wafer process system comprising :

- a wafer transfer device located in a transfer chamber;

- a plurality of chambers attached and sealable relative the transfer chamber;

- a laser detector for measuring the impurities within each of the chambers.

It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the device taught by Muka with a measurement device as taught by

Toda et al. in order to determine the amount of impurities in each chamber of the device during processing of the wafers.

Regarding claims 13-15 Muka teaches a method of assembling a batch of wafers in a cassette comprising the steps of:

- placing at least a first and a second cassette in a store;

- employing a cassette handling device to select and move a first cassette from the store to a sorting operation, wherein the first cassette is opened and placed in active connection with a wafer handling device within the chamber;

- employing a cassette handling device to select and move a second cassette from the store to a sorting operation, wherein the second cassette is opened and placed in active connection with a wafer handling device within the chamber;

- processing said wafers from said cassettes in a process chamber;

- employing a wafer handling device to sort wafers between the first and second cassettes;

- sealing said cassettes after the sorting step. Muka does not teach placing the wafers in a measuring station. Toda et al. teach a method of processing wafers comprising the steps of :

- removing wafers from a cassette via a wafer handling device within a handling chamber;

- placing said wafers in a process chamber attached to said handling chamber;

- taking measurements while the wafer is in the process chamber;

- returning the wafer to a cassette.

It would have been obvious to one of ordinary skill in the art, at the time of invention to modify the methods taught by Muka by adding a measurement step while processing the wafer as taught by Toda et al. in order to measure impurities in the process chamber in real time and change operation parameters as needed to keep from ruining a wafer during processing.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muka in view of Toda et al. as applied to claim 8 above and further in view of Rush et al. Muka in view of Toda et al. teach the limitations of claim 8 as above they do not teach the use of a turntable. Rush et al. teach a wafer transfer machine that uses a turntable (12) to hold wafer carriers (24). It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the device taught by Muka in view of Toda et al. with a turntable as taught by Rush et al. in order to allow one wafer cassette to be moved onto the turntable as another wafer cassette is being accessed by a wafer handler, thereby allowing different parts of the device to run concurrently.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muka in view of Toda et al. as applied to claim 8 above and further in view of Garric et al. Muka in view of Toda et al. teach the limitations of claim 8 as above they do not teach the store as being a rotatable magazine. Garric et al. teaches a store (3000) for wafer cassettes that is a rotatable magazine. It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the device taught by Muka in view of Toda et al. with a rotatable magazine as taught by Garric et al. as the rotatable store is considered a conventional means to store wafer cassettes.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 571-272-6923. The examiner can normally be reached between 7:00-4:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached at 571-272-6607. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CAF
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5-16-05


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SUPERVISORY PATENT EXAMINER
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